CHEM 225, FALL 2009

ORGANIC CHEMISTRY LAB

Instructor:
Conference Hours:

If you need accommodations in this class related to a disability, please make an appointment as soon as possible to see me in my office.

COURSE DESCRIPTION:

Laboratory techniques used in synthetic organic chemistry.

RATIONALE:

Organic Chemistry 225 is a semester course and is tailored to students who are pursuing careers in sciences.

COURSE OBJECTIVES:

1. To learn common techniques in organic chemistry laboratories.
2. To learn how to prepare laboratory records.
3. To be familiar with safety regulations in the laboratory.
4. To learn to evaluate experimental data.

MATERIALS:

1. Reference Textbook: K. L. Williamson, Macroscale and Microscale Organic Experiments, Fourth Edition.
2. Reference Textbook: L. G. Wade, Organic Chemistry, 6th edition, Prentice-Hall, Inc. Inglewood Cliffs, NJ 2006.
3. (**Required**) Hardbound Notebook (Composition notebook).
4. (**Required**) Students should wear approved safety goggles. **These glasses should not have holes around their frames** (they are sold at LATECH, True Value and GSU bookstore).

ATTENDANCE:

All students are expected to attend and complete each scheduled lab class throughout the semester**. An appointment must be made with the instructor to complete any missed Lab experiments. An approved excuse must be presented before any make-up lab experiments are allowed. Laboratory experiments that are missed must be completed before the next regularly scheduled class period. The written lab report may then be turned-in no later than the beginning of the next regularly scheduled class. Each student will be allowed a maximum of two(2) make-up Labs per semester.** Any student (including athletes) failing to complete at least (6) laboratory experiments and/or the corresponding written lab assignments will be assigned a course grade of **F**. **Students are responsible for learning the material covered during the missed class.**

Each student must show a valid, university issued identification card during exams and quizzes. No exam will be administered to a student without an identification card.

ASSESSMENT PROCEDURES:

Each student is required to prepare an individual laboratory report. Follow the attached instructions from (a) to (q) to keep a laboratory record. Follow the attached tentative schedule unless otherwise indicated. Complete instructions (a) to (m) as the **pre-laboratory assignment**; the student will show this pre-lab and request the signature of the instructor before going to the lab. After students finish the experimental part of the lab (instruction (n)) they will need to request that the instructor sign their lab notebooks. Laboratory reports will not be graded if they are not signed. Students should turn in their lab work on the due day.

Late Penalties:

Laboratory reports and/or exercises will receive late penalties. Late work grade will be reduced in 10 points per each week after the due day.

Technical Procedures:

Students should use equipment properly. In addition, safety procedures and cleanliness will be taken in account.

- **Safety Rules:**

  Students have to obey safety rules. If not, students will lose points. Students can be dismissed from the lab and/or the course if they persist in violating safety rules.

- **Cleanliness:**

  Students should leave everything clean after finishing bench work including balances. Place glassware and chemicals where they were found at the beginning of the class. The complete class will lose up to 10 points if shared equipment is found dirty.

Midterm Exam:

A Midterm Exam will be held during class time and will be graded out of 100 pts.

Final Exam:

A Final Exam will be given during class time and will be graded out of 200 pts.

Evaluation of a bench laboratory class will be as follows:

Task	Points
Laboratory report (if it was signed by the instructor)	50
Technical procedures: safety and Cleanliness	20
Pre-Laboratory assignments; if done before class time	20

Course grade:

$$\frac{\text{Your points}}{\text{Total number of points}} \times 100 = \text{Percent Grade}$$

Grade assignments:

Percent Grade	→	Letter Grade	Percent Grade	→	Letter Grade
90.0 to 100.0	→	A	60.0 to 69.9	→	D
80.0 to 89.9	→	B	$\leq$ 59.9	→	F
70.0 to 79.9	→	C			